

The Claims:

1. An orally administered testosterone delivery system with sustained release properties, wherein one dose of the system delivers an effective dose of testosterone as measured by total serum testosterone in the range of about 250 to 1100 ng/dL for greater than about 7 hours.
2. An orally administered testosterone delivery system with sustained release properties, wherein one dose of the system demonstrates improved sustained release properties over the same dose of micronized testosterone wherein the micronized testosterone is administered as dry particles alone or in a gelatin capsule.
3. An orally administered testosterone delivery system with sustained release properties, wherein one dose of the system demonstrates at least a 10% increase in sustained release properties when compared to the same dose of micronized testosterone, wherein the micronized testosterone is administered as dry particles alone or in a gelatin capsule.
4. The delivery system of claim 1, wherein at least part of the testosterone is microencapsulated.
5. The delivery system of claim 1, wherein all of the testosterone is microencapsulated.
6. The delivery system of claim 4, wherein the testosterone is suspended in a lipid.
7. The delivery system of claim 6, wherein the lipid is a solid at room temperature.
8. A method for preparing an oral testosterone delivery system with sustained release properties comprising the steps of:
 - microencapsulating testosterone particles;
 - melting at least one lipid;
 - mixing in a surfactant to said melted lipid;
 - dry-mixing dry particles comprising at least one filler and said microencapsulated testosterone;
 - mixing the dry particles with said melted lipid to form a suspension such that said dry particles are continuously coated by said lipid such that said suspension exhibits pseudoplastic and/or thixotropic properties, and pouring or molding said suspension into a dosage form, and wherein the dry particles optionally include non-encapsulated testosterone particles.
9. The method of claim 8 in which said testosterone particles are microencapsulated with a filming agent.
10. The method of claim 9 in which said microencapsulated testosterone particles

are micronized.

11. The method of claim 9 in which said testosterone particles are microencapsulated with a rupturing agent.
12. The method of claim 11 in which said rupturing agent is sodium starch glycolate.
13. The method of claim 12 in which said lipid source forms 20% to 40% by weight of said suspension, and said dry particles form 60% to 80% by weight of said suspension.
14. The method of claim 13 in which said fillers have a size ranging from 10 to 500 microns in diameter and comprise whey.
15. The method of claim 8 in which said lipid is selected from the group consisting of a hard butter, petroleum wax, vegetable fat or animal stearines.
16. The method of claim 8 in which said lipid suspension contains a rupturing agent.
17. The method of claim 16 in which said rupturing agent is sodium starch glycolate.
18. The method of claim 17 in which the dry particles include artificial flavorings.
19. An oral testosterone delivery system having sustained release properties comprising:
 - A. at least one lipid;
 - B. at least one surfactant; and
 - C. dry particles;wherein, the dry particles contain testosterone and at least one filler;
wherein, the dry particles are continuously coated with the lipid and form a homogenous suspension with the lipid;
wherein the suspension exhibits pseudoplastic and/or thixotropic properties; and
wherein the suspension is formed or shaped into the appropriate solid dosage form by molding or pouring the suspension when in a liquid or semi-liquid state.
20. The testosterone delivery system of claim 19 in which at least part of the testosterone is microencapsulated.
21. The testosterone delivery system of claim 20 in which said microencapsulated testosterone contains a rupturing agent.
22. An oral testosterone delivery system having sustained release properties comprising:
 - A. at least one lipid;
 - B. at least one surfactant; and
 - C. dry particles

wherein the dry particles contain testosterone and at least one filler;
wherein the dry particles are continuously coated with the lipid and form a homogeneous suspension with the lipid;
wherein the suspension exhibits pseudoplastic and/or thixotropic properties;
wherein the suspension is formed or shaped into the appropriate solid dosage form by molding or pouring the suspension when in a liquid or semi-liquid state;
wherein at least part of said testosterone particles is present in said suspension as a microencapsulated particle.

23. The pharmaceutical delivery system of claim 22 in which said microencapsulated testosterone contain therein a rupturing agent.

24. The testosterone delivery system of claim 23 in which said rupturing agent comprises sodium starch glycolate.

25. A method for preparing an oral testosterone delivery system having sustained release properties comprising:

melting at least one lipid;

mixing in at least one surfactant to said melted lipid;

mixing in dry particles to said melted lipid and surfactant, wherein said dry particles contain testosterone, and at least one filler;

wherein the dry particles are continuously coated with the lipid and for a homogeneous suspension with the lipid;

wherein the suspension exhibits pseudoplastic and/or thixotropic properties; and

wherein the suspension is formed or shaped into the appropriate dose by molding or pouring the suspension when in a liquid or semi-liquid state.

26. The testosterone delivery system of claim 25, wherein the system includes additional drugs, medicaments or food supplements.

27. The delivery system of claim 6, wherein the lipid is a liquid.

28. An orally administered testosterone delivery system with sustained release properties, wherein one dose of the system delivers an effective dose of testosterone as measured by total serum testosterone in the range of about 250 to 1100 ng/dL for greater than about 7 hours, wherein the testosterone is delivered as a tablet, capsule, bolus, liquid, suspension or a mixture.

29. The delivery system of claim 28, wherein at least part of the testosterone is microencapsulated.